

# A NEW GENUS AND TWO NEW SPECIES OF WEEVILS FROM TEXAS WITH NOTES ON OTHERS (CURCULIONIDAE)

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The following new weevils are described here so that the names will be available for use in a proposed paper on the Curculionidae of Texas. Taxonomic and distributional notes on three other species are also presented.

## **Mesagroicus parmerensis** NEW SPECIES

(FIGURES 1-7)

Elongate oval; derm piceous, antennae and legs reddish-brown; densely clothed with rounded to irregular-shaped, closely appressed scales, the margins of which are contiguous to narrowly overlapping; scales predominately brown above, gray on ventral side of body, on legs, and in a broad lateral vitta along each side of prothorax and elytra; body and appendages bearing long, tan, suberect, bristlelike to more slender and parallel-sided setae.

**HOLOTYPE MALE:** Length, 4.9 mm. (from anterior margins of eyes to apices of elytra); width, 2.0 mm. (across elytra); pronotum width, 1.4 mm.; pronotum length, 1.1 mm.

Rostrum quadrate, flattened dorsally, basal two-thirds clothed above with irregular-shaped scales and prominent, suberect setae, apical portion shining and remotely punctured; median sulcus narrow, deep, beginning on front between eyes and extending forward to a point opposite antennal insertions; nasal plate triangular, emarginate in front, indistinctly defined behind; scrobe broad, but deep and well-defined, moderately angulate, directed immediately beneath lower margin of eye. Antenna stout; scape strongly clavate, densely squamose, setose, apex reaching upper posterior margin of eye; funicular segments prominently setose, segment 1 stouter and as long as 2+3, 2 slightly longer than 3, 3-7 approximately equal in length, 7 wider; club elongate oval, pubescent, as long as preceding five funicular segments combined. Eyes subcircular, moderately convex. Forehead slightly convex in side view, clothed with scales and setae like those on rostrum. Prothorax a little wider than long, sides evenly rounded, widest at middle; base of prothorax with collarlike constriction extending across dorsum and down sides; scales on pronotal disk brown, irregular in shape, their margins contiguous, those scales along each lateral margin of pronotum and on propleura gray in color forming a broad vitta which extends back into side of elytra; setae more abundant along lateral margins of prothorax, bristlelike with acute tips, but on dorsal surface intermixed with some which are more slender, parallel-sided and narrowly truncated at tips; sculpture of prothorax, beneath the dense scales, consists of very much flattened, inconspicuous tubercles, a

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few of which are visible through the scaly covering. Scutellum triangular, squamose. Elytra approximately 2.8 times longer than prothorax; basal margin, in region of scutellum, sloping gently forward to level of mesonotum, more nearly perpendicular at sides; humeri rounded, merging gradually into the parallel elytral sides; elytral scales rounded, narrowly overlapping, striate, especially on base of elytra and on declivity, scales mostly brown on disc but faintly mottled with lighter scales, gray in broad vitta along each side; intervals wide, flat, each bearing a row of long, slender, suberect setae; striae indistinct, punctures small, each bearing a slender to squamiform white seta. Ventral side of body densely clothed with rounded, grayish, slightly iridescent scales, recumbent setae, and a few scattered plumose scales on coxae, mesosternum and along lateral edges of abdominal sterna. Abdominal sterna 1 and 2 broadly impressed at middle, 1 more distinctly so, first suture arcuate, sternum 2 longer at middle than 3+4, 5 same length as 3+4. Femora strongly, abruptly clavate, densely covered with rounded, opalescent scales. Tibiae slender, straight, inner margins slightly sinuate, scales irregular in shape and not overlapping, setae more abundant along inside margin near apex; all tibiae feebly mucronate. Tarsi slender, setose with a thin coating of small scales, segment 3 deeply emarginate, much broader than 2, segment 4 as long as 2+3. Claws divergent.

ALLOTYPE FEMALE: Length, 5.2 mm.; width, 2.5 mm.; pronotum width, 1.6 mm.; pronotum length, 1.2 mm.

Resembles male holotype, except body is more robust, prothorax more strongly rounded, impression in middle of first abdominal sternum not so well defined, and only the fore and middle tibiae mucronate.

TYPE MATERIAL: Holotype male and allotype female, Parmer Co., Texas VI-2-1958 (feeding on seedling cotton) in Collection of Department of Entomology, A. & M. College of Texas. Eleven paratypes, same data as holotype and allotype, to be deposited as follows: 3 in U. S. National Museum, 8 in A. & M. College of Texas.

The length of 7 paratype males ranges from 4.2 to 4.9 mm. Four female paratypes range from 4.4 to 5.5 mm. in length. The variation in the paratype series is slight, except that some have the brown scales on the disc of the elytra conspicuously mottled with lighter scales. Some of the paratypes have distinct, dark median and sublateral vittae on the pronotum.

*Mesagroicus parmerensis* n. sp. is apparently not closely related to any known species of the genus, and will not trace to either of the three groups proposed by Buchanan (1929). The characters possessed by members of this new species appear sufficiently distinct to warrant the establishment of a fourth group. The following adaptation of Buchanan's key to the groups of *Mesagroicus* will serve to separate *Mesagroicus parmerensis* n. sp. from others now known to occur in North America.

1. Basal margin of elytra (the deflexed portion extending downward to the mesonotum) perpendicular, or nearly so, from side to side. Elytral scales dense and broadly overlapping..... 2
- Surface of elytra, in vicinity of scutellum, sloping gently forward and downward to level of mesonotum, the basal margin perpendicular only at the sides. Elytral scales rounded or irregular-shaped, less numerous and at most only narrowly overlapping..... 3



2. Form rather stout, the elytra slightly inflated behind. Elytra setae truncate at tip, shorter, stouter, in a nearly regular single row along each interval, and in side view, distinctly curved and inclined. Pronotal tubercles moderately to strongly developed, though sometimes obscured by a surface crust.....**Group I**
- Form more slender, subparallel. Elytral setae acute at tip (bristlelike), longer, more numerous and less regular, and more nearly erect. Pronotum not tuberculate.....**Group II**
3. Legs with numerous hairs, but without appressed scales, punctation visible. Elytra with plumose scales on flanks.....**Group III**
- Legs setose, and also with a dense coating of rounded to irregular-shaped, closely appressed scales, punctation not visible. Elytra without plumose scales on flanks .....(*Mesagroicus parmerensis* n. sp.) **Group IV**

The specimens included in the type series were found feeding on seedling cotton in Parmer Co., Texas, VI-2-1958. Infestations heavy enough to cause concern among the farmers in that area were reported throughout May and June, 1958. According to these reports the damage caused by the weevils was confined to the edges of fields bordering rangeland. The injury to the seedling cotton resulted from the feeding of the weevils on the stems of the young plants immediately after the plants had emerged from the soil. Apparently this weevil is only an occasional pest of cotton, since infestations occurred in limited areas during the early growing season of 1958 and were not noticed at all the following year.

The little information available on the food habits of members of this genus of weevils indicates that other species of *Mesagroicus* have occasionally damaged cultivated plants. *Mesagroicus herricki* (Pierce) (= *Lepidocricus herricki* Pierce, 1910, p. 362) was described from specimens found feeding on cotton in Mississippi. Buchanan (1929) cites label data indicating that *Mesagroicus minor* Buchanan has been found "injuring potato" in Kansas, and *Mesagroicus hispidus* Buchanan "feeding on sugar beet" in California.

### **Paranametis** NEW GENUS

Traces to *Anametis* Horn in Pierce's (1913) key to genera of the tribe Tropiphorini. However, the present new genus differs from *Anametis*, type *granulata* (Say), not only in general habitus, but also by the following combination of characters: body smaller and much more robust than in that species, transverse impression before eyes not so well defined, eyes located more laterally on the head, scape of antennae densely squamose, suberect setae of body stouter, and apex of abdominal sternum 8 strongly

compressed and bladelike (e.g., as in *Dyslobus granicollis* Lec. and *D. decoratus* Lec.).

Robust, densely clothed with closely appressed, contiguous to separated, irregular-shaped scales and short, clavate, suberect to recumbent setae. Head with shallow, transverse impression at base of rostrum before eyes. Rostrum longer than head, widened at apex; median carina distinct; nasal plate crescent-shaped, sharply limited behind by a ridge which is rounded to obtusely pointed posteriorly. Scrobes lateral, deep, moderately angulate and directed toward extreme lower margin of eye. Scape squamose, strongly clavate, apex reaching middle posterior margin of eye. Antenna 7-segmented, first two segments longer, remaining segments obconical, each slightly longer than wide, segment 7 distinctly separated from club. Ocular lobes prominent. Prothorax wider than long, covered with conspicuous, scale-covered tubercles, prothoracic sides moderately and evenly rounded, median longitudinal groove feebly evident for most of length of pronotum. Elytra oval, widest before middle, humeri obsolete. Scutellum small, triangular. Metathoracic wings absent. Elytral intervals each bearing confused rows of setae. Elytral striae 9 and 10 confluent for a distance at middle. First abdominal suture feebly arcuate. Abdominal sternum 2 slightly longer at middle than 3+4. Posterior portion of abdominal sternum 8 strongly compressed to form a bladelike structure. Femora strongly clavate. Fore and middle tibiae dentate within, all tibiae mucronate. Corbels of hind tibiae enclosed. Tarsal segments pubescent beneath, segment 3 bilobed and much broader than 2. Claws free.

TYPE SPECIES: *Paranametis distincta* n. sp., here designated.

### **Paranametis distincta** NEW SPECIES

(FIGURES 8-12)

HOLOTYPE FEMALE: Length, 4.9 mm. (from anterior margins of eyes to apices of elytra); width, 2.8 mm. (across elytra); pronotum width, 1.8 mm.; pronotum length, 1.1 mm.

Derm dull black, antennae and legs dark reddish-brown. Gray scaly vestiture inconspicuously mottled with pale brown and lighter scales on pronotum and elytra. Rostrum thickened and widened apically, covered above with dense, irregular-shaped scales, clavate, suberect setae, and a brown, waxy exudation; median carina distinct, originating at bottom of transverse impression at base of rostrum and extending anteriorly to where it terminates in a short, deep groove immediately behind a point opposite antennal insertion; nasal plate crescent-shaped, emarginate in front, limited behind by a sharp ridge; scrobes lateral, moderately angulate, well-defined throughout and directed toward extreme lower margin of eye. Antenna rather long; scape slightly arcuate, strongly clavate, setose and densely squamose, apex reaching middle posterior margin of eye; first two funicular segments elongate, 1 slightly longer than 2, segment 3 very slightly longer than 4, 5 and 6 approximately equal in width and length, 7 longer and wider; club oval, darker, as long as four preceding funicular segments combined, densely pubescent and with a few erect setae. Eyes feebly convex, oval, obtuse beneath, with a deep orbital groove along upper anterior margin; posterior margin of eye contiguous with ocular lobe. Prothorax distinctly wider than long, sides moderately rounded, median longitudinal groove faintly evident, ocular lobes prominent; sides and dorsum of pro-



thorax densely covered with prominent, scale-covered tubercles, each of which bears a flattened, clavate, recumbent to suberect seta on its summit; scales in median and sublateral vittae lighter in color than remaining scales on prothorax. Elytra oval, widest before middle, 3 times longer than prothorax and about 1.5 times wider, base feebly emarginate, humeri obsolete; scutellum small, scarcely visible. Elytral scales striated, irregular-shaped, those along base of elytra dense and with contiguous margins, scales elsewhere narrowly separated so that derm is visible between them; intervals feebly convex, bearing confused rows of clavate setae, these setae becoming finer on intervals 8 and 9; striae punctures, round, shallow, each bearing a minute seta. Ventral side of body covered with scales like those on dorsal surface. Sutures of metasternal side pieces indistinct. Abdominal sternum 2 a little longer than 3+4, 5 almost as long as three preceding sterna combined and with a depression on each side of middle near apex. Femora strongly clavate, scales narrowly overlapping and more rounded than those on ventral side of body. Fore and middle tibiae dentate within, scales more irregular in shape than those on femora; all tibiae mucronate, hind pair feebly so. Tarsal segment 3 broad, deeply bilobed, segment 4 longer than 2+3. Claws free.

TYPE MATERIAL: Holotype female and 3 paratype females (male unknown), Gillespie Co., Texas, V-3-1959 (S. D. & H. R. Burke) to be deposited in Collection of Department of Entomology, A. & M. College of Texas. The 3 paratypes agree well with the holotype. The type series was collected while sweeping mixed, low vegetation at the edge of a sparsely wooded area.

### ***Mecynopyga texana* Pierce**

*Mecynopyga texana* Pierce, 1908, Proc. U. S. Nat. Mus., 34: 179.

Pierce erected *Mecynopyga* to contain this interesting little weevil which he described from a single specimen collected at San Diego, Texas. Regarding the relationship of *Mecynopyga* to other weevil genera, he stated, "The genus belongs near *Pseudanthonomus* in the Dietz tables". Examination of the type (in U.S.N.M.) revealed that the prolonged sides of the second abdominal sternum extend posteriorly to the fourth segment, completely covering the lateral edges of the third. Accordingly, this weevil should be placed in the tribe Tychiini and not in Anthonomini as originally proposed by Pierce. *Mecynopyga* is apparently most closely related to *Tychius* from which it may easily be distinguished by the prominent pygidium protruding past the apices of the elytra (figure 13). The type is a female. Other than the usual characters of sexual dimorphism in weevils, the male differs from the female by the deeper transverse impression of the fifth abdominal sternum.

Besides the type, another specimen collected at Cotulla, Texas, was seen in the Collection of the U. S. National Museum. I collected a total of six specimens during May 1959, in Kleberg, Zapata, and Live Oak counties. All of these collection localities are within 100 miles of the type locality of San Diego, Texas. These specimens were taken while beating shrubbery along fence rows and roadsides.

***Anthonomus molochinus* Dietz**

*Anthonomus molochinus* Dietz, 1891, Trans. Am. Ent. Soc., 18: 231.

Numerous specimens of this weevil were swept from mixed vegetation in a small, isolated area bordering a pond in Anderson Co., Texas, VIII-31-1958. The species has previously been reported only from Montana, New Hampshire, Iowa and Ottawa, Canada.

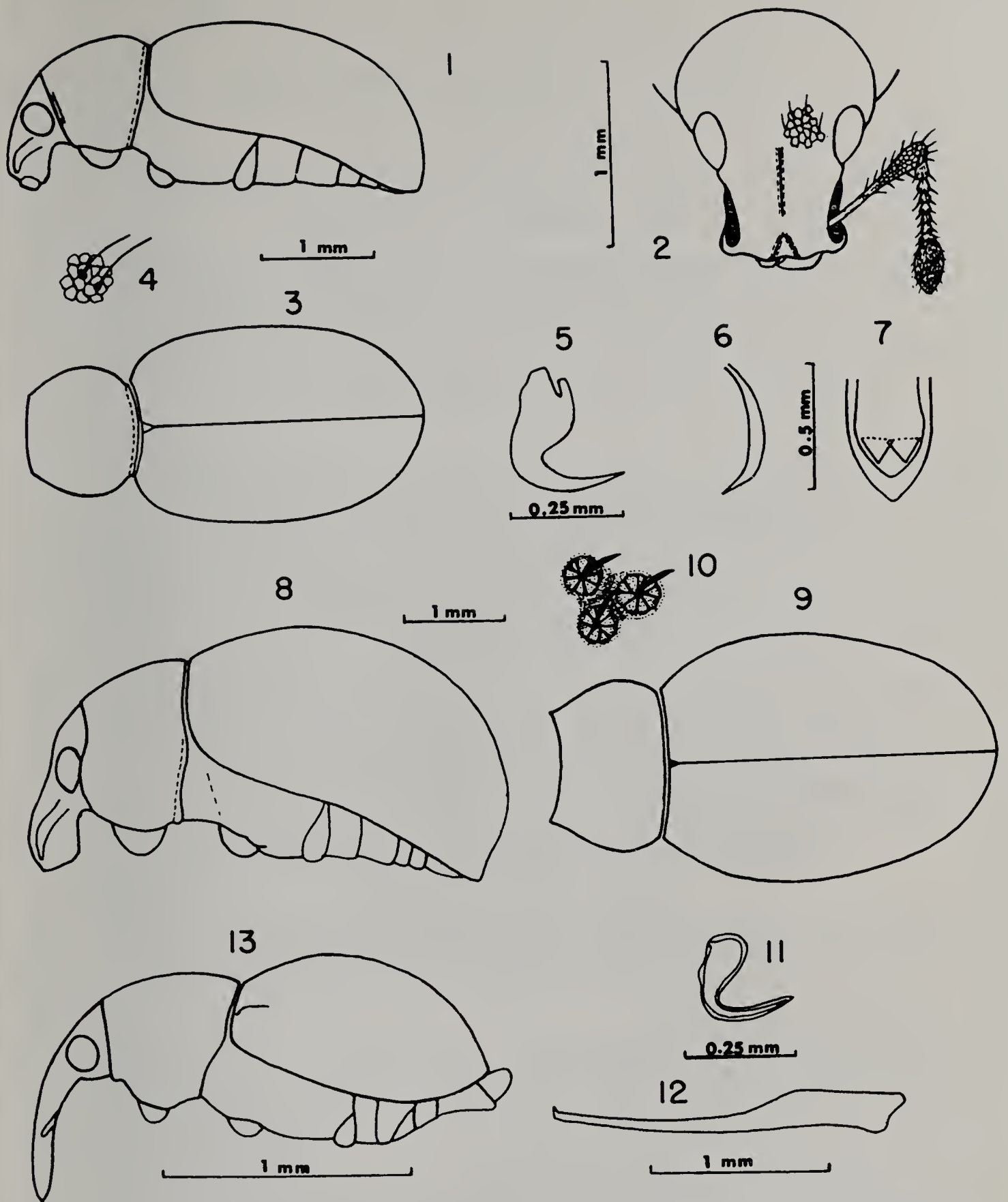
***Bagous pusillus* LeConte**

*Bagous pusillus* Leconte, 1876, Proc. American Phil. Soc., 15: 187.

A single example of this small weevil was collected at a light in Garwood, Texas, V-15-1959 (C. F. Bailey). Tanner (1943) lists the distribution of the species as Florida, Illinois and Massachusetts.

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FIGURES 1-7.—*Mesagroicus parmerensis* n. sp.: 1, Side view; 2, Front view of head and rostrum; 3, Dorsal outline of elytra and prothorax; 4, Portion of pronotum showing scale arrangement; 5, Spermatheca; 6, Side view of median lobe of male genitalia; 7, Dorsal view of apex of median lobe.

FIGURES 8-12.—*Paranametis distincta* n. sp.: 8, Side view; 9, Dorsal outline of elytra and prothorax; 10, Portion of pronotum (greatly enlarged) showing tubercles and scale arrangement; 11, Spermatheca; 12, Side view of 8th abdominal sternum of female.

FIGURE 13.—*Mecynopyga texana* Pierce, side view.